Unit A: Experimental Design

Activity 10: Evaluating Clinical Trials

Name: ____________________________

Period: __________________________

Purpose: To evaluate clinical trials to determine which is worth funding.

Instructions:

Conducting studies on people is time-consuming and expensive. Researchers need funding. The U.S. National Institutes of Health (NIH) is one organization that funds such studies.

a. Your job is to evaluate four different clinical trials and determine which one you think has the best experimental design and is worth giving money to. Each member in your group will read one of the clinical trials.

b. While you read, use the checklist below to help you evaluate the clinical trial.

c. Then, as a group, you will share your findings about each trial and write the advantages & disadvantages of each trial on the separate “Advantages & Disadvantages” worksheet.

d. Finally, answer all Analysis Questions at the end of this worksheet.

Data:

1. Name of study______________________________

2. Checklist to help you evaluate study.

   a. ___ Is there a problem/purpose stated? (What are the researchers trying to answer?)

   b. ___ What is the quality of the background research? Explain.

   c. ___ Is this research important? Is there a significant impact on society?

   d. ___ Is the experimental design good? Use the following criteria to help.

      1. ___ Is a hypothesis given?

         i. ___ SS?

         ii. ___ MV?

         iii. ___ RV?

      2. ___ Are the clinical trials mentioned (Placebo)?

      3. ___ Are variables controlled?

      4. ___ Are trials repeated 3X?

      5. ___ What was the sample size? (Is it significant?)

      6. ___ Tells how data will be collected and analyzed?

   e. ___ Is testing done first on animals?

   f. ___ What is the effectiveness of animal tests? Give evidence.

   g. ___ Are there ethical concerns about this experiment? Explain.
Analysis Questions:
1. You find out that NIH has only enough money to fund one study and plans to fund the best one. Explain which study you would fund. Support your answer with evidence and identify the trade-offs of your decision.

   Checklist: To write a complete answer...
   a. First state your opinion.
   b. Provide a minimum of two pieces of evidence that support your opinion.
   c. Consider all sides of the issue AND identify the (+/-) trade-offs of your decision.

(Attach more paper as needed)